

2003 Revisions to Chapters 1200-4-1 and 1200-4-5
Rules of the Tennessee Department of Environment and Conservation
Summary of Public Comments and Responses
November 5, 2003

I. Background and Regulatory History

The Division of Water Pollution Control received authorization from EPA to administer the NPDES permit program in December 1977. The division receives its authority to do so under the Tennessee Water Quality Control Act (TWQCA). The division implements the NPDES permit program as well as the state operating permit program for wastewater disposal that does not involve discharge to waters of the state through Chapters 1200-4-1 and 1200-4-5 of the department's rules. This action represents the first major revision to those rules since their promulgation in 1977. In order to maintain program delegation from EPA, the state rules must be kept consistent with federal rules. Over the past twenty-plus years, EPA has made many changes to the federal rules. Tennessee is revising its rules in order to maintain consistency with EPA's rules.

The rule revision includes changes to the construction of both chapters to remove unnecessary, outdated and/or duplicative provisions. As a result of this action, Chapter 1200-4-1 will contain the duties and authorities of the board and commissioner and Chapter 1200-4-5 will contain the permitting rules.

The most substantial change to Tennessee's rules is the inclusion of specific provisions related to concentrated animal feeding operations or CAFOs. In 1999, TDEC, responding to statewide concerns about CAFOs, formed a multi-agency, multi-interest advisory group that developed a strategy for permitting CAFOs. That strategy has worked well for Tennessee. In April 2003, EPA promulgated new CAFO rules that addressed many aspects of CAFO operation including nutrient management, waste storage and land application. EPA's rules also require states to modify their permitting programs to accommodate the new federal requirements. In order to do so, the division again formed a multi-agency, multi-interest advisory group that provided input on the CAFO provisions that are included in this rule revision. The rules that will be presented to the Water Quality Control Board are consistent with federal CAFO rules, but also contain elements of Tennessee's 1999 CAFO Permitting Strategy. The division's basis for including state-specific requirements is rooted in circumstances particular to Tennessee.

For example, on a state level, nutrient inputs from medium-sized animal operations far outweigh those from large-sized operations. From a water quality standpoint, livestock activities contribute to the impairment of approximately 40 % of the water bodies that the division identifies as not fully supporting designated uses. In contrast, human waste directly affects around 20 % of partially or non-supporting water bodies and industrial waste affects less than 10 % of

those waters. Therefore, it makes sense to use regulatory tools to address pollutants coming from livestock operations.

It should be noted that CAFOs are simply a regulated sub-set of a larger agricultural community that is not affected by these rules. For example, the application or use of manure or litter that is produced as a result of non-confined animal operations or even non-CAFO animal feeding operations is not covered by either Tennessee's or EPA's regulations. That being said, application of manure or litter in a manner that causes a condition of pollution remains a violation of the TWQCA.

II. Cost of Compliance Associated with These Rule Revisions

With exception of the new CAFO rules that will be discussed in following paragraphs, the majority of the rule revisions that will be presented to the WQCB for adoption do not include significant new requirements. For that reason, any additional costs associated with these regulations that would be borne by most (non-CAFO) permittees are considered minimal. This includes the sign requirement for new or expanded discharges, which only must be sturdy enough to last for thirty days. The division's experience with a similar requirement for new ARAP permit activities suggests that the costs associated with posting such a sign are not burdensome.

With regard to the bypass provisions, the additional cost potential is more directly related to EPA's ultimate interpretation of the federal bypass provisions than with the inclusion of those provisions within Tennessee's rules. Until such time as EPA's recently announced policy on the internal bypass issue is finalized, the division cannot make an accurate assessment of the cost associated with complying with the prohibition of bypass.

With regard to costs associated with the CAFO provisions, the state considered the differences between the requirements of the 1999 strategy and the new regulations. For that reason and others, Tennessee's estimated regulatory burden is significantly less than that estimated by EPA. For example, EPA cost estimates for CAFOs included not only costs for items that are already required under Tennessee's current program, but also costs for items that are not required under the federal rule. In other instances, EPA's costs reflect practices that are not associated with Tennessee operations. Tennessee estimates that the additional cost burden for poultry CAFOs will range from \$400 to \$650 for initial set-up and between \$200 and \$350 annually. The costs are estimated to be similar for medium size swine and dairy operations. Tennessee did not associate a cost for nutrient management plans, since many facilities developed waste management plans under the 1999 strategy and also since the NRCS will develop plans for CAFOs at no charge. Tennessee does recognize that there may be additional costs for implementing certain components of plans that may be different from the

existing waste management plans. However, the availability of 75 % cost share money for such expenditures should mitigate much of those additional costs.

The division believes that these regulations will successfully address water quality concerns without harming the competitiveness of Tennessee's livestock producers.

III. Comments Regarding 1200-4-1

- a. 1200-4-1-.02(1) Composition of the board – One commenter observed that the provisions related to the composition of the board simply repeat the language of the TWQCA. The commenter further suggested that the restatement of TWQCA provisions is unnecessary and should be deleted. Another commenter requested that wording be added to allow representatives to be appointed even if their system experienced occasional noncompliance as long as the system maintained substantial compliance with the provisions of the TWQCA.

The division agrees with the first commenter that language that simply restates provisions of the law is unnecessary and will be deleted. With respect to the second comment, the language originally proposed by the division was taken verbatim from the TWQCA. Such a specific change in wording in the act would require legislative action.

- b. 1200-4-1(2)(a), (c) and (e) (formerly 1200-4-1(4)(a), (c) and (e)) Procedures of the board – One commenter suggested that notice of hearing also be placed on the department's website and sent to a list of people who have indicated that they wish to be notified of board hearings. At least three commenters objected to the language that would have allowed the board to refuse to grant an audience to someone who otherwise complies with the requirements necessary for obtaining such an audience. One commenter suggested eliminating the requirement that petitions be filed on 8.5" x 11" paper.

The division is adding language to subparagraph (a) that requires notice of board hearings be mailed to interested persons and also makes provision for using electronic media for notice of board hearings. The division is also deleting the last sentence of subparagraph (c). In order to maintain conformity with the other state laws and regulations regarding legal documents, the division will continue to require that petitions be filed on 8.5" x 11" paper.

- c. Information procurement – One commenter suggested adding a provision that would allow for information to be made available on the TDEC website. Another commented on the availability of copies. Another commenter requested that protected information include that which is relevant to vulnerability assessment.

The division is adding a provision to 1200-4-1-.04 that states that public information may be made available electronically. The division is also adding

language that allows for copies of general information material to be made. This language also gives the division discretion as to what materials may be copied. It should be noted that nearly all of the material categorized as general information is available on the state website. State law regarding system vulnerability remains in flux; therefore the division is not in a position to limit access to information based on vulnerability assessments.

III. Comments Regarding 1200-4-5

- a. Construction of rule – One commenter suggested that the CAFO provisions of the rule are more prescriptive and restrictive than those for other regulated activities. The same commenter recommended that any specialized CAFO provisions be incorporated into the appropriate section of the chapter.

The CAFO provisions to be added to this chapter must not conflict with those of federal rules. The state agrees that the CAFO provisions tend to be more detailed than those associated with other regulated activities. This is the result of the performance measures for CAFOs being expressed in terms of best management practices instead of numeric effluent limitations. The state does not agree that CAFOs are more restrictively regulated than other industrial sectors. The construction of this part will remain as presented in the draft revision.

- b. 1200-4-5-.02, Definitions

- i. (3) Animal feeding operation – One commenter asked why the presence of vegetation would preclude a facility from being defined as an animal feeding operation. The same commenter requested information on regulations regarding aquaculture facilities. Another commenter asked if the 45 days of containment were consecutive.

The presence or absence of vegetation has historically been a part of the definition of animal feeding operations, particularly CAFOs. The vegetation test is the primary means to differentiate pasturelands from areas of confinement. However, some pasture-based operations may have confinement areas that do meet the definition of an AFO. Federal regulations address aquaculture facilities. While state rules do not contain specific provisions regarding such facilities, Tennessee does regulate aquaculture facilities under its TWQCA authority and in accordance with federal effluent guidelines.

The 45 days of containment necessary for definition as an AFO are not necessarily consecutive.

- ii. BAT – One commenter requested that a definition be provided for the term, “BAT.”

EPA defines BAT as best available technology economically achievable whereas the division has historically used the term, “BATEA” instead. The division is adding language to 1200-4-5-.02(8) that clarifies that BAT also refers to the best available technology economically achievable.

- iii. (13) Bypass – At least two commenters disagreed with the division’s adoption of the EPA definition for bypass. One commenter referenced the definition for bypass found in TDEC Rule 1200-4-3.04 that defined bypass as discharge of waste from other than the permitted outfall.

The division’s rules must not conflict with EPA rules. Part of the purpose of this rule revision is to remove inconsistencies with EPA rules, including Tennessee’s previous definition of bypass. It should be noted that with the Water Quality Control Board’s recent adoption of revisions to TDEC Rule 1200-4-3, the state definition of bypass as a discharge of waste from other than the permitted outfall is eliminated. Therefore the definition of bypass found in 1200-4-5-.02(13) will remain in the revisions that the division will present to the Water Quality Control Board.

- iv. (15) CBOD₅ - One commenter requested that a definition be provided for the term, “CBOD₅.”

The division is adding a definition for CBOD₅ at 1200-4-5-.02(15)

- v. (16) Closure plan – A few commenters requested clarification of the requirements for closure plans. One commenter asked that the plan rehabilitate the land upon which manure has been applied as well as any waters that have been impacted. This commenter also requested that the plan include compensation for other landowners or waters that have been contaminated by the CAFO operation.

The intention of the closure plan is to make sure that any remaining manure, litter or process wastewater is properly disposed of before a CAFO terminates permit coverage. In its original proposal, the division required that a CAFO submit a closure plan 30 days prior to its final day of operation. The division agrees with the commenters that additional clarification is necessary and is making the following changes: 1) adding a definition of “closure plan” at 1200-4-5-.02(16), 2) requiring in 1200-4-5-.14(5)(c), that CAFOs submit a closure plan at the time of application and 3) adding language in 1200-4-5-.14(12) that reminds CAFOs that permit coverage must be maintained until no potential for discharge remains. These changes eliminate the confusion as to when a closure plan should be submitted and as to when permit coverage can be terminated.

Land to which manure has been applied in accordance with a nutrient management plan does not require rehabilitation as part of a closure plan

nor would it negatively impact any adjacent lands. Any impacts to waters should be addressed by TDEC enforcement (discussed in item v.) as opposed to the closure plan.

- vi. (20) Comprehensive nutrient management plan (CNMP) versus nutrient management plan (NMP) – At least one commenter requested that the regulation specifically define the term, “comprehensive nutrient management plan.” Another commenter asked that the regulation clarify the difference between a CNMP and an NMP. One commenter requested that the requirement for a CNMP for large CAFOs be dropped citing costs concerns.

The division is adding a definition for “comprehensive nutrient management plan” at 1200-4-5-.02(20). However, a CNMP cannot be fully described in a definition. CAFOs required to develop a CNMP or CAFOs otherwise having an interest in CNMPs should refer to the NRCS website at http://www.nrcs.usda.gov/programs/afo/cnmp_guide_index.html for a more detailed description of the elements of a CNMP. The components of a nutrient management plan are given in 1200-4-5-.14(15)(b).

The division is modifying the proposed regulations to require a CNMP for large, wet facilities only. This change is based on the increased risk of nutrient transport associated with wet operations as opposed to dry litter/manure operations. The division recommends that CAFOs requiring CNMPs use the services of the NRCS to eliminate preparation cost. Additionally, costs can be minimized by CAFOs taking advantage of the 75 % cost share available for implementation.

- vii. (22) (formerly, (18)) Construction – One commenter disagreed with the inclusion of “contractual obligations to purchase equipment” in the definition of construction since an agreement to purchase equipment is not an activity that would affect water quality.

The division believes that the commenter has concerns relative to permitting of storm water from construction activity. This definition is consistent with TCA 69-3-103(6) and has meaning beyond construction storm water. For purposes of construction storm water permitting, the term, “commencement of construction,” is more applicable. In order to clarify this distinction, the division is adding a definition for commencement of construction at 1200-4-5-.02(17).

- viii. (formerly, 19) Daily average amount – One commenter observed that the terms, “daily average amount” and “monthly average amount” are essentially the same and therefore, recommended deleting the daily average amount definition.

The division is deleting the term, “daily average amount.”

- ix. (27) and (29) (formerly, (24) and (29)) Director and division – One commenter observed that the definitions for director and division are not consistent with the TWQCA in that the act refers to the Division of Water Management in both definitions while the proposed regulations refer to the Division of Water Pollution Control.

There no longer exists a “Division of Water Management” within the Department of Environment and Conservation. For a brief period of time, the Divisions of Water Pollution Control and Water Supply were combined under the title, “Division of Water Management.” Some time ago, the department, under the authority of the executive branch, reorganized and reestablished the separate Divisions of Water Supply and Water Pollution Control. The definitions included in this rule accurately reflect the agency charged with implementing the TWQCA.

- x. (30) (formerly, (27)) Dry weather overflow event – One commenter asked if separate discharges within a 24-hour period from the same manhole are separate events.

Yes, separate discharges from any point are separate events no matter the time period.

- xi. (31) (formerly, (28)) Effluent limitations – One commenter expressed an opinion that the definition of effluent limitations should not apply to discharges that directly enter waters of the state. The commenter explained that the discharges into adjacent waters that are not connected to waters of the state are outside of the purview of the TWQCA.

The authority of the TWQCA is very broad, covering all water surface or subsurface that is contained within, flows through or borders upon the state of Tennessee. Additionally, the permit authority given by the TWQCA requires permitting for activities that may affect waters of the state such as discharge or placement of wastes in a location from which they are likely to move into waters of the state. Therefore, the definition of effluent limitations appropriately refers to discharges into or adjacent to waters.

- xii. (34) (formerly, (31)) Grab sample – One commenter suggested adding that the sample time cannot exceed 15 minutes as is indicated on EPA Form 2C, Application to Discharge Wastewater from Existing Manufacturing, Commercial, Mining and Silvicultural Operations.

The division is keeping the definition for grab sample as is. It is sufficiently broad to encompass the definition found in Form 2C and also accommodate requirements for other grab samples that may differ from those referenced in Form 2C.

- xiii. (36) IC₂₅ - One commenter requested that a definition be provided for the term, "IC₂₅."

The division is adding a definition for IC₂₅ at 1200-4-5.02(36).

- xiv. (39) and (40) (formerly, (35) and (36)) Instantaneous maximum and minimum concentrations, respectively – One commenter requested that the definitions for instantaneous maximum and minimum concentrations be clarified to avoid indicating that a parameter such as pH be recorded in units of mass per volume.

The division is adding the phrase, "where appropriate," in each definition after the phrase, "units of mass per volume," in order to provide necessary clarification on this point.

- xv. (43) LC₅₀ - One commenter requested that a definition be provided for the term, "LC₅₀."

The division is adding a definition for LC₅₀ at 1200-4-5-.02(43).

- xvi. (44) (formerly, (39)) Major facility – One commenter requested that the division consider a more precise definition for the term, "major facility."

The definition is consistent with the federal definition. In practice, the division generally uses EPA guidance on rating industrial facilities to determine major/minor status. However, the division sees value in the flexibility given in the definition of major facility. For that reason, the definition will remain as is.

- xvii. (46) (formerly, (40)) Manure definition – One commenter suggested that manure regulation should be limited to when it is being applied at greater than an agronomic rate or in such proximity to waters that it could cause pollution. Another commenter asked for clarification on whether manure is defined on a wet or dry basis.

The division notes that though manure is defined in this set of regulations, that actual regulation of manure is limited to that manure that is produced by, and land applied by, a CAFO. The division further advises that pollution of waters of the state by manure remains a violation of the TWQCA.

The definition of manure given in this section is intentionally not specified as either wet or dry, since the definition is inclusive of other materials that may be mixed with manure for disposal. It should be noted that in subsequent provisions of this regulation that the state is allowing flexibility for CAFOs to report amounts of manure in either tons or gallons. The division expects that wet operations will measure manure in terms of gallons while dry operations will measure manure/litter in terms of tons.

- xviii. (46) Mature cow – Some commenters requested that the term, “mature dairy cow” be defined in the regulation.

The term, “mature dairy cow” is now defined in 1200-4-5-.02(46) as a cow that has previously given birth to a calf.

- xix. (49), (50), (89) and (90) (formerly, (43), (44), (78) and (79)) Monthly average amount, monthly average concentration, weekly average amount and weekly average concentration, respectively – One commenter expressed concern that there were inconsistencies within these definitions and in particular, that the definition of monthly average concentration was different from current NPDES permit language.

The division recognizes that over the years the definitions of the above referenced terms that were found in permits deviated from those in regulation. In this revision, the division is attempting to simplify these terms so that any additional specificity that may be included in permit definitions will not conflict with these regulations. In reviewing these definitions, the division does not observe functional inconsistency, but rather variations in wording. For example, a summation of all measurements divided by the number of days that a measurement was made is equivalent to an arithmetic mean. The division believes that the definitions for monthly and weekly average amounts can be further simplified by using the term, “arithmetic mean.”

- xx. (56) Non-contact cooling water - One commenter requested that a definition be provided for the term, “non-contact cooling water.”

The division is adding a definition for the term, “non-contact cooling water” at 1200-4-5.02(56).

- xxi. (64) (formerly, (55)) Permit action – One commenter suggested adding the word, “revocation” to the definition for permit action.

The division is adding both the term “revocation” and the term “reissuance” to the list of activities that are included under permit action.

- xxii. (70) (formerly, (60)) Rainfall event – One commenter asked where the rainfall measurements are to be taken.

Rainfall should be measured in an area representative of the area drained by the collection system. For larger systems, this may require more than one measurement point.

- xxiii. (71) (formerly, 61) Sanitary sewer overflow, (30) (formerly, (27)) dry weather overflow event, (91) wet weather overflow event - One commenter requested that a definition be provided for the term, “overflow.” One commenter suggested replacing the term, “sanitary sewer overflow (SSO),” with the term, “combined sewer overflow (CSO)” and then redefining dry weather overflows as sanitary sewer overflows. Another commenter asked if multiple manholes overflowing multiple times within the same rainfall event is one overflow event.

In the proposed revisions, the division describes two separate occurrences during which wastewater from a collection system is discharged at a point other than the permitted outfall. Those are dry weather overflow event and SSO event. SSO refers to an unpermitted discharge from a separate collection system; that is, a system that was not designed to be the primary collection device for storm water. CSO on the other hand, refers to a discharge from a combined sewer system; that is, a system designed to convey both storm water and sanitary sewage. EPA uses the term, “SSO” to broadly define both dry-weather and wet-weather discharges. The division sees merit in the commenter’s suggestion that the definition of SSO be modified to reflect the EPA definition. The division further believes that such modification will also address the comment requesting a separate definition for overflow. However, the rule must differentiate between dry weather and wet-weather SSOs. Therefore the division is now redefining the terms, dry weather overflow and sanitary sewer overflow and adding a definition for wet weather overflow.

The division’s current practice is to consider multiple occurrences of discharge even from multiple manholes are considered one wet weather overflow event, so long as all discharges are the result of a single rainfall event, however, this is inconsistent with federal SSO policy and proposed regulation (refer to the January 4, 2001 Notice of Proposed Rulemaking). For that reason, the definition for wet weather overflow will specify that discharges from multiple points be counted separately.

- xxiv. (84) (formerly, (74)) Variance – One commenter suggested that the definition of variance contained in the proposed rule be replaced with the definition found in 40 CFR §122.2.

The proposed definition of variance is consistent with that found in TCA 69-3-103. The division believes that the proposed definition does not conflict with the federal definition.

- xxv. (86) Washout - One commenter requested that a definition be provided for the term, “washout.”

The division is adding a definition for washout at 1200-4-5-.02(86).

- xxvi. (87) (formerly, (76)) Waters – One commenter suggested replacing the definition of waters with that found in 40 CFR §122.2.

The proposed definition is consistent with that found in TCA 69-3-103, which is broader than the federal definition of waters.

- xxvii. Frequent – One commenter requested that a definition be provided for the word frequent.

The use of the word frequent in this regulation is the same as that in common usage, therefore a specialized definition is not necessary.

- b. 1200-4-5-.03 Exclusions – One commenter suggested excluding Class V injection well from NPDES permit coverage. Another commenter took issue with certain activities not requiring NPDES permits.

The division notes that EPA does not specifically exclude activities requiring Class V injection well permits in 40 CFR § 122.3. Additionally, considering the number of groundwater to surface water connections associated with Tennessee streams, there exists the possibility of a discharge being subject to NPDES permitting as well as requiring a Class V well permit.

The activities that are listed in 1200-4-5-.03 are specifically excluded in both state and federal law. Any change to the status of those activities with respect to NPDES permitting must occur legislatively.

- c. 1200-4-5-.04 Prohibitions

- i. (a) and (b) Radioactive discharges –One commenter suggested that the rules prohibit permits from allowing discharges of low and medium radioactive waste in addition to high-level radioactive waste.

Medium and low-level radioactive wastes generally refer to items (such as clothing, cleaning materials, tools, biological materials and medical supplies) that have been contaminated with radioactive material or have

themselves become radioactive through exposure to neutron radiation. Distinctions between high-level waste and other levels are based on where the material originated, not necessarily on the level of radioactive associated with the material. The division does not envision a scenario where such materials would be allowed to be discharged. Therefore, the division is adding language to 1200-4-5-.04 that would prohibit the discharge of any radioactive waste.

- ii. (e), (formerly (d)) Area-wide management plan - Another commenter requested that a discharge less stringent than that included in an area-wide waste treatment management plan be allowed if that exception would not result in water-quality violations.

The provision regarding area-wide plans envisions that an area-wide plan, such as a TMDL would result in a permittee having more stringent provisions, not less stringent. To write an exception otherwise would not be in keeping with either the intent of the TWQCA or that of the CWA.

d. 1200-4-5-.05 Application, Issuance

- i. Heading— One commenter suggested that “NPDES Permit” be added to the heading of this section.

This section actually refers to all wastewater-permitting activities including but not limited to NPDES permitting. Therefore, the division is adding the word, “Permit” to the heading.

- ii. (2) Applications; deficiency or completeness notice – One commenter requested that the rules include the current requirement that applicants be provided notice of completeness. The same commenter requested that the rules include an additional provision requiring that the division send notice within 30 days of receipt of a complete application.

The division will reinstate the requirement that the division provide notice of completeness to applicants subsequent to a determination that the application and any additional materials constitute a complete application.

- iii. 1200-4-5-.05(3) – (5) and 1200-4-5-.14(11) Permit application timeframes – Three commenters, representing the regulated community objected to the 365-day application requirement major NPDES applicants or permit holders. Another commenter asked about timeframes for general permits. Yet another commenter noted that the application timeframe of 180 days placed an additional burden on CAFOs that would otherwise be subject to the notice of intent requirements of the general permit.

The division originally increased the application timeframe for major discharges in recognition of the increasingly lengthy process associated

with both major permit issuance and reissuance. However, the division understands the commenters' concern and will replace the 365-day requirement with the minimum 180-day requirement. Please note that the division will continue to advise applicants and permittees to submit applications as early as possible to account for the delays often associated with permitting major dischargers.

Timeframes for general permits are addressed in paragraph (5) of this section.

The division acknowledges that the proposed regulations had a conflict between 1200-4-5-.05(5) and the provisions of 1200-4-5-.14(11) with regard to CAFOs that may seek coverage under the general permit. The division has added language to 1200-4-5-.14(11) that should eliminate this conflict.

- iv. (6)(c) Signatory requirements – One commenter asked that a delegated representative be allowed to sign permit applications.

The signatory requirements of this part are consistent with those of 40 CFR § 122.22(a) that do not allow a delegated representative to sign applications for municipalities, or other public agencies.

e. 1200-4-5-.06 Public Notice

- i. (1) Sign requirement – Some commenters objected to the sign requirement for new and expanded discharges, suggesting that other forms of notice might be more effective. Other commenters supported the sign requirement.

The division included the sign requirement, based on input from citizen interest groups, in order to facilitate early public involvement in the permitting process for activities that represent a change from the status quo. The division sees value in front-loading public participation for interested citizens as well as the permittee or applicant. The method of notice, posting a sign near the entrance of a facility, was chosen because the division believes it to be a low cost, yet effective, way to target those persons that may be most affected by a new or expanded discharge. This requirement is modeled after a provision found in our Aquatic Resource Alteration Permitting (ARAP) rules. It should be noted that the ARAP sign requirement has been effective and is not considered overly burdensome. For those reasons, the division's proposal to the board will include the requirement for new or expanded discharges to post a sign upon making application for a new or modified permit.

- ii. (2) Items to be included with draft permit – One commenter suggested that the regulation should list the rationale and instructions on providing notice in addition to the other items that are included with the draft permit.

The division added language to paragraph (2) that would require that the rationale be provided along with draft permits as well as other information that the commissioner deems necessary.

- iii. (4) – (9) Public notice, paragraphs – One commenter had questions regarding the differences between current public notice rules found in 1200-4-1-.05(3)(c), the division's current practice and the proposed revisions. The commenter suggested that the rules should reconcile any differences with public notice procedures in practice. Another commenter suggested language that the division pay for required public notice. One commenter recommended that language be added to paragraph (5) that indicated that no public notice is required for minor permit modifications. Another commenter requested that notice be mailed to residences and businesses that are within 2 miles of a proposed activity.

The division's current practice of requiring permittees to give notice was established in order to make sure that the provisions of 1200-4-1-.05(3)(c) were being followed. In response to comments, the division is making additional revisions to the new public notice provisions of this rule.

First of all, the division is adding flexibility by specifying in paragraph (4) that the commissioner's duty regarding public notice is to ensure that the public is notified rather than giving notice. The division is also making substantial changes to the subparagraphs of (9) by deleting certain procedures, such as posting in the courthouse or city hall, that have proved less useful in notifying the public of proposed permit actions. The division is also adding language that allows for the use of electronic media such as e-mail or website postings to give notice of proposed permit actions.

The division anticipates that when these rules, if promulgated as proposed, become effective, the current practice of requiring permittees and/or applicants to provide notice of the proposed permit action will be discontinued thus alleviating the concern about the cost of public notice.

The division believes that the requirement for the applicant for a new or expanded discharge to post a sign provides adequate notice for activities that are a change from the status quo. The other proposed methods (mail out to mailing list, web posting) to provide notice to the public are adequate for reissuances of permits. Finally, the commissioner may choose other ways of providing notice as deemed necessary.

- iv. (10) Items to be included with the public notice – One commenter suggested that environmental impact statements be prepared and included with the public notice. The same commenter asked that notices include a list of potential pollutants. Another commenter requested that information regarding the use support status of the receiving waters be included with the public notice.

Environmental impact statements (EIS) are required for federal actions (federally-issued permits or federally-funded projects) that have been determined to be environmentally significant. State issuances of NPDES permits are specifically excluded from consideration as an action requiring EIS consideration. It is unusual for federal projects that are similar in scope to state-issued NPDES permits to be considered significant enough to require that an EIS be prepared. It should be noted that all permits issued by the State of Tennessee must be deemed protective of water quality. That determination is a measure of the potential environmental impact of the activity on the waters of the State of Tennessee.

In some cases, it is infeasible to list all the pollutants regulated by a particular permit given the complexity of many of the permits issued by the state. The division is including language that would give the commissioner flexibility to add information to the public notice. The division is not specifically adding a provision to list use support status, but may consider it in the future. Persons are advised to contact the division to obtain additional information regarding permits in which they have interest. With the use of e-mail, detailed permit information can be immediately transmitted to interested persons upon request.

- v. (11) Comment period – One commenter noted that this provision allows 30 days for interested persons to submit comments on tentative determinations, but the draft permit cover letter gives applicants and/or permittees only 25 days in which to comment.

The comment period of 30 days applies to all interested persons including permittees and applicants. The 25-day period referenced in the draft permit cover letter is intended to account for the number of days within the 30-day comment period that may be needed for mailing. The division may consider revising the language of the draft permit cover letter to be clear that the applicant has 30 days from the date of the public notice in which to make comments.

- vi. (12) and (13) Public hearings and notice – One commenter requested that public hearings be held in all cases. The same commenter requested that notices of hearings be mailed to residences and businesses located within two miles of the proposed activity. Another commenter requested that use support information be included with the public notice for public hearings.

Another commenter requested that the sentence, “Instances of doubt should be resolved in favor of holding a hearing.” be deleted. An additional commenter requested that the names of persons requesting hearings be included with the hearing notice.

The division disagrees that public hearings should be mandatory. The division believes that it is appropriate to hold hearings only in cases where significant public interest is known to exist or if a request for a public hearing has been received. The proposed rules call for hearing notices to be published in local newspapers and to be mailed to persons who have expressed interest in the activity. The division believes that these measures in addition to steps that the commissioner may opt to take are adequate to notify interested persons of public hearings.

The division is including language that would give the commissioner flexibility to add information to the public hearing notice. The division is not specifically adding a provision to require use support status, but is adding the may do so on a case-by-case basis. Finally, the division will retain the language regarding “instances of doubt.” This language reflects the division’s long-standing practice regarding public hearings.

The division will not include language that would list the names of persons requesting public hearings. In some cases, the division may decide to hold a hearing regardless of specific requests. Also, the names of persons requesting a hearing may be too numerous to include in a public notice format. Finally, such inclusion may prove to intimidate persons from requesting public hearings and stifle public participation.

- f. 1200-4-5-.07(4) Standard conditions – One commenter suggested that instead of specifying standard conditions in permits, the division could refer to 1200-4-5-.07(4) in order to save paper, printing and mailing costs.

Although this suggestion would reduce paper use to a certain extent, the division must be accommodating to all permittees, including those whose access to rules may be limited.

- i. (4)(b) Duty to reapply – One commenter expressed concern that the language in the proposed revisions included the phrase, “and obtain a new permit,” in the requirements for maintaining permit coverage beyond the expiration date of the permit.

The language is consistent with the federal language of 40 CFR§ 122.41(b). The division notes that 40 CFR§ 122.6(a) allows continuation of permits until the reissued permit becomes effective. The reason for this difference is that permit coverage ultimately depends upon the permittee

receiving a reissued permit and that merely submitting an application is not necessarily a guarantee of receiving a reissued permit.

- ii. (4)(h) Monitoring records and reporting – A commenter suggested changes to the wording in subparts 1.(i), (iii) and (iv) to become consistent with federal regulation and to reflect the reporting requirements that are found in permits. Another commenter suggested that this subparagraph reference electronic reporting in addition to the more traditional methods. One commenter expressed concern that the language of 3.(ii) was not specific enough in regard to additional monitoring. Yet another commenter expressed concern that the term, “exact place” was insufficiently specific.

The division is making changes to the above provisions in response to the commenters’ suggestions. The division is adding a new subparagraph under (4)(h)1. that requires information on the laboratory where analyses are performed. The division is also adding a sentence in subparagraph (4)(h)3. that allows for electronic reporting. The language of 3.(ii) is consistent with federal regulation. The division believes that it is adequately specific for the purposes of reporting all relevant analyses in compliance with a given permit.

Exact place refers to the point within a plant (for example either influent or effluent) where samples are collected.

- iii. 4(j) Planned changes – One commenter suggested that notification be made to residents and businesses that are located within two miles of the activity and that a public hearing be held as a result of the planned change.

The planned changes listed in (4)(j) are often triggers for permit modification, an action that is subject to the public notice provisions of 1200-4-5-.06. Please refer to comment h.vi. regarding public hearings.

- iv. 4(k) Transfers - One commenter suggested that notification be made to residents and businesses that are located within two miles of the activity and that a public hearing be held as a result of a transfer.

The division does not typically require formal permit action as a result of a transfer. In most cases, the division makes changes in the permit file to reflect any changes of ownership and does not make changes to the permit. Therefore, public notice is not required for transfers.

- v. 4(l) and (m) Bypass prohibition and exception– One commenter noted an inconsistency in the exceptions to prohibited bypass with respect to anticipated and unanticipated bypass. Two commenters objected to the prohibition of bypass provision. One commenter suggested that

notification be made to residents and businesses that are located within two miles of the facility that bypasses and that a public hearing be held as a result of the bypass. The same commenter suggested that allowable bypass only be permitted for no more than 90 days and that the division would not consider cost of implementing improvements that would eliminate bypass as a mitigating factor.

The division is adding language to (l) 3. and (l) 4. that remedies that inconsistency. EPA recently announced a draft policy that would provide guidance on the bypass provisions of 40 CFR § 122.41(m). EPA does not plan to modify the provisions of the federal rule; therefore, no change is necessary to the revisions that the division will present to the Water Quality Control Board.

A permittee's bypass of treatment is not a permit action taken by the division and thus, is not subject to public notice requirements. Most in-plant bypasses occur as a result of temporary hydraulic overload, which would rarely last more than a few days. In-plant bypasses that result from maintenance would also be temporary. The division does not envision a bypass scenario that would last 90 days. The rules, as proposed do not consider cost in the determination of whether or not a bypass is allowable.

- vi. (4)(n) Overflows - One commenter suggested that these provisions apply only to sanitary sewer systems. One commenter noted an inconsistency in the exceptions to prohibited overflows with respect to anticipated and unanticipated overflow. One commenter suggested that notification be made to residents and businesses that are located within two miles of an overflow and that a public hearing be held as a result of any overflow. The same commenter suggested that the overflow be corrected via alternatives or back-up equipment within 90 days of the overflow and that the division would not consider cost of implementing improvements that would eliminate overflow as a mitigating factor. Finally, this commenter requested that the permitted activity be halted if overflows are not prevented.

In practice, overflows typically refer to discharges from sanitary sewer system; however, some large, industrial facilities may also have collection systems from which overflows should not be allowed.

An overflow from a permittee's collection system is not a permit action taken by the division and thus, is not subject to public notice requirements. Dry weather overflows that are the result of maintenance are usually very short-term in nature. Similarly, dry weather overflows that result from blockages or other unforeseen problems are also short-term and do not tend to be recurrent. Sanitary sewer overflows (SSOs) that are the result of wet weather are violations that are most often associated with municipal

collection systems and are often the subject of enforcement action taken by the division. The corrections associated with SSO elimination usually require system-wide rehabilitation and may take considerably more than 90 days to remedy. In its enforcement actions, the division can require that the municipalities involve the public including persons affected by overflows and rate-payers in considering the costs associated with improvements to collection systems. Finally, since the permitted activity associated with overflows involves collection and treatment of human waste, halting the permitted activity would result in an immediate and severe threat to human health and the environment.

- vii. (4)(o) Reporting noncompliance - One commenter suggested that the rules should specify that noncompliance be reported to the local division office as opposed to the commissioner.

The division is adding language to this provision that makes this clear.

- g. 1200-4-5-.07(5)(a)1.(iv) and (5)2.(iv) Notification requirements – One commenter suggested that the rule specify that these provisions are in accordance with 40 CFR § 122.44(f).

One of the purposes of the rule revision is to maintain consistency with federal rules. The division disagrees with the commenter that specificity is necessary in these particular provisions.

- h. 1200-4-5.08

- i. (1)(a) Effluent limitations and standards – One commenter expressed concern that technology-based limits may not be adequate for all facilities since some may discharge to waters that need additional protection.

The provision for water quality-based effluent limitations is given in 1200-4-5-.10.

- ii. (1)(c) and (1) (j) 7. Effluent limitations and standards for POTWs – One commenter expressed concern that this provision would require upgraded technology at reissuance. One commenter requested that the division eliminate any exceptions to anti-backsliding.

(1)(c) requires the application of promulgated technology-based limits. (1)(j)7. is a component of the anti-backsliding provisions of this rule that prevents a facility that has been achieving a high level of treatment from lowering the level of treatment to meet a less stringent limit that might otherwise be applied. These provisions are consistent with the anti-backsliding provisions established in the federal CWA. The division agrees with the anti-backsliding tenets of the CWA and believes that the

allowable exceptions of (1)(j) are both necessary and protective of water quality.

- iii. (1)(d) Toxic effluent limitations – One commenter suggested that toxic effluent limitations consider potential for human or animal exposure based upon any measurable quantity using the best available detection methods.

The division uses this provision in concert with water quality standards for toxic pollutants to establish effluent limitations that consider toxicity, persistence, bioaccumulation as well as the potential for human and/or animal contact. Tennessee's water quality standards include a section that lists required detection levels, which tend to reflect the lowest routinely achieved detection levels.

- iv. (1)(m) Expression of effluent limitations – One commenter requested that this provision allow flexibility in expressing limits as daily, weekly or monthly based on effluent variability.

The division addresses the issue of effluent variability with the frequency of monitoring required in permits.

- v. (1)(q) In-plant sampling – One commenter expressed concern that limits placed on internal waste streams may subject an industry to excessive in-plant sampling.

The requirement for placing limits on internal waste streams is consistent with 40 CFR § 122.45(h) and is only applicable when circumstances prevent the imposition of limits at the point of discharge or federal effluent limit guidelines specify internal waste stream sampling.

- i. 1200-4-5-.09, Technology-based permitting – One commenter requested that language deleted from the current rule be reinstated. The provision of interest (from 1200-4-5-.03) read, “it is not the intent or purpose of these regulations that all permits require limitation of or monitoring of all parameters listed in paragraph (2) of this Section. Rather, it is the intent of this Section that each permit include limitations of those parameters listed that are directly attributable to the processes causing the discharge for which the permit is granted.”

The paragraph referenced in this excerpt included the specific numeric limitations that were applicable to industrial wastewater treatment plants. Since the division is not proposing to include those limits in this revision, the language requested by the commenter is unnecessary.

- j. 1200-4-5-.11, Duration of permits – One commenter suggested that the language of paragraph (1) be augmented with language that stated that any non-NPDES permits would remain in effect until replaced by an NPDES permit. Another

commenter suggested that this part limit the submission to complete application forms and that it is the permittee's responsibility to make timely application.

This particular section actually refers to both NPDES and non-NPDES permits. Since Tennessee has been an authorized NPDES program for sometime, the two-permit scenario envisioned by the commenter would not exist.

The division typically requires timely submittal of completed applications as a condition of permit continuance. However, under some circumstances, an alternative submittal may be acceptable. The division is changing the language of (2) to reflect the typical scenario while allowing the commissioner some flexibility in filing requirements.

- k. 1200-4-5.12, Appeals, citizen complaints and declaratory orders – One commenter requested that paragraph (1) specify acceptable reasons for appeals. The same commenter expressed concern that this TWQCA does not authorize persons to challenge permits since to do so would be to file a complaint against the commissioner, a prohibited action under TCA 69-3-118(c). This commenter, as well as one other, also expressed concern about a lack of a time limit for filing a complaint or petition for declaratory order. Another commenter requested that affected persons be allowed the same review rights as permittees. This commenter also opined that federal law and regulation require such an appeal right. The same commenter asked for the meaning of affected person.

The paragraph simply advises permittees and/or applicants of their right to have the board review any condition of the permit. The rule need not specify what constitutes a meritorious appeal. That is for the board to decide.

The procedures described under paragraph 2 are intended to spell out what remedies are available to affected persons who object to permit actions taken by the commissioner. The remedy described in 1200-4-5.12(a)1. envisions that a properly written complaint would list the permittee as the violator of the TWQCA and would purport that the permittee, while operating in compliance with the permit, would violate the act.

Neither applicable provision of the TWQCA or the UAPA limits the timeframe for citizens to file complaints or petitions for declaratory orders. Therefore, the division cannot limit their rights with this regulation. Similarly, the TWQCA does not grant the same rights to affected persons as are granted to permittees with respect to appeals. Therefore, the division cannot grant rights to individuals beyond those allowed by statute. Although through the complaint and declaratory order provisions of the TWQCA and UAPA, affected persons may challenge permit actions, filings of either a complaint or petition do not stay the division's action. It is the division's understanding that though federal statute requires a provision for citizen intervention, it does not require that, for state programs, such intervention stay the action of interest.

- l. 1200-4-.5.14 (1) and (3) definition of and permitting of medium-sized CAFOs – Several commenters expressed concern that including all medium-sized AFOs as CAFOs went too far beyond EPA regulations. One commenter suggested modifying the threshold numbers for medium-sized CAFOs. Several commenters contended that the cost of complying with permit requirements was overly burdensome for medium-sized operations. One commenter asked whether animal numbers were based on a daily or annual count.

Originally, the division included provisions that would define all medium-sized AFOs as CAFOs. The division agrees with several of the commenters that such a broad approach is not necessary. In determining how best to address potential discharges from medium-sized operations, the division reflected upon the 1999 strategy. The approach taken in 1999 included permitting all new operations meeting certain size criteria as well as those that were located within watersheds that were already impaired due to livestock operations. For consistency, the division believes that it is best to adopt the EPA threshold numbers for medium CAFOs.

In this regulation, the division will also permit those operations that meet the size criteria of Table 1200-4-5-.14.1 and are either new or located within watersheds of waters that are impaired for nutrients or pathogens. The basis for this approach lies in the fact that animal feeding operations are potential sources of the pollutants of concern. Pursuant to its requirements under the Tennessee Water Quality Control Act (TWQCA), the division is obliged to set regulatory controls on those activities that have the reasonable potential to cause or contribute to a violation of a water quality standard.

The threshold numbers defining large and medium operations are found in Table 1200-4-5-.14.1 and are based on the average number of animals per growing period.

- m. 1200-4-5.14(6)(l) and also 1200-4-5.14(15)(e), 3rd party issue – Many commenters objected to the provisions that required that a CAFO that transfers 20 tons per year or more, provide documentation that the 3rd parties that receive the CAFO's waste have an approved off-site disposal plan.

The division originally included these provisions in an attempt to level the playing field between CAFOs that must apply manure, litter or process wastewater in accordance with specific requirements and 3rd party disposers that have no such requirements. However, during the comment period, it became clear to the division that operators of CAFOs do not feel harmed by a lack of requirements on 3rd party disposers. In many cases, a CAFO's litter is considered a salable commodity.

The division is deleting the provisions that would require the submittal of an approved off-site disposal plan. Instead the regulations will include a requirement

that a CAFO that transfers 100 tons or more of manure, litter or process wastewater, document that the 3rd party has received nutrient analysis of the manure and that the 3rd party has signed an agreement to properly dispose of materials transferred to them. Additionally, the CAFO must keep a record of the manure, litter or process wastewater transferred to 3rd parties.

- n. 1200-4-5.14(10) Changes to a no potential discharge determination - One commenter suggested that notification be made to residents and businesses that are located within two miles of the activity and that a public hearing be held as a result of a CAFO seeking coverage under an NPDES permit.

A large CAFO that requests permit coverage must make application for an individual NPDES permit, an action that is subject to the public notice provisions of 1200-4-5-.06. Please refer to comment h.vi. regarding public hearings. Other CAFOs may seek coverage under the state's general permit for CAFOs. That action is not subject to the public notice provisions of 1200-4-5.06.

- o. 1200-4-5-.14(11) Deadlines – One commenter asked for clarification on the phrases, “new source performance standards,” and “seek to obtain permit coverage.”

New source performance standards refer to a standard that is applied to new facilities and often represents the BAT level of treatment. When the division requires a person to seek permit coverage, the division intends for them to either make application for an individual permit or submit a notice of intent to become covered under an applicable general permit.

- p. 1200-4-5-.14(15)
 - i. (a) and (b) Nutrient management plans – One commenter requested that a list of best management practices (BMPs) be compiled for each activity and that list then be mailed to residents and businesses within a two-mile radius of the CAFO. One commenter requested that the division keep the provision requiring a CNMP for large CAFOs.

Current state strategy as well as the provisions of the new rule require submittal of nutrient management plans, which include identification of BMPs to be used, to the state for approval. As such, these plans become part of the public record and subject to the availability provisions of Chapter 1200-4-1.

The version of the rules to be presented to the board will continue require CNMPs for large, wet CAFOs.

- ii. (b)(6) Chemicals and contaminants – One commenter expressed concern that this requirement may cause problems for dairy or swine farrowing operations.

This requirement does not apply to chemicals that may be present in wash waters that are associated with certain operations and are used in accordance with label instructions. This requirement would prohibit the intentional disposal of chemicals into the CAFO's waste treatment system.

- iii. (d) Record keeping – Several commenters expressed concern about the record keeping requirements. One commenter suggested that maintaining records for 5 years was excessive. Another commenter requested that the division define the phrase, “upon request,” in the context of a permittee making records available to the director. Another commenter requested assistance and/or training in meeting the record keeping requirements.

The record keeping requirements of 1200-4-5.14(15)(d) are identical to those required by EPA; therefore the division has little discretion to modify those provisions. A permittee's records should be maintained such that they are readily available to a state inspector at the time of an audit.

It is the division's intention to develop guidance documents to supplement these regulations that would provide instruction on record keeping and include forms that CAFOs could copy and use to comply with the regulations. The division also anticipates that other agencies such as TDA, NRCS and the UT Extension Service will provide training and assistance to CAFOs.

- q. 1200-4-5.14(16) BMPs for dairy, cattle, swine, poultry, veal
 - i. Applicability – One commenter suggested that this subsection apply only to sites that are within 100' of any down-gradient surface stream.

The BMP requirements for dairy, cattle, swine, poultry and veal CAFOs are consistent with federal regulation. To limit the applicability to only those sites within 100' of down-gradient waters would result in these regulations being less stringent than the federal rule.

- ii. (a)(1) Tennessee Phosphorus Index – One commenter asked that the regulation better describe the index. The same commenter had questions about how the index is derived, who can develop it and what costs are associated with it.

The division is adding the phrase, “...a tool developed by the University of Tennessee Extension Service and the NRCS to assess the risk of phosphorus movement from the application area to waters of the state,” to subparagraph (a) to provide clarification.

The specific parameters of the index are not appropriate for inclusion in the regulation, but can be described here in detail. Use of the phosphorus

index is only necessary if the soil tests, performed in accordance with University of Tennessee guidelines, indicate no need for phosphorus to be added to the soil. Should the soil test warrant it, a field-specific phosphorus index must be completed to assess the potential for phosphorus transport from the field. To do so, several factors must be considered including dominant soil type (as determined from county soil maps), soil texture, slope, location (East, Middle or West Tennessee), plant residue (pasture, row-crop or no-till), width of any vegetative buffers, the amount of phosphorus contained in the material to be applied (manure, litter or fertilizer), whether any litter amendments have been used, other phosphorus sources, the timing of application and the application method (surface spreading or injection).

It is the division's understanding that determining the index will initially be done by NRCS or technical service providers approved by NRCS. The division further understands that funding has been made available in the recent Farm Bill that should shoulder the costs of developing site-specific phosphorus indexes. Eventually, the division expects that training will be made available to producers so that they could themselves develop a phosphorus index for their fields. In any event, costs borne by producers, if any, will be minimal.

- iii. (b) Soil and manure analysis – One commenter stated that the prescribed frequency for soil analysis was excessive while another suggested that once every 5 years was too infrequent. Yet another commenter asked how much soil analysis cost. One commenter questioned the whether manure analysis was relevant to the amount of nutrients delivered to the soil.

The frequency of soil analysis was established in EPA's regulation. At this time, the division has no basis for deviating from the testing schedule set by EPA. The University of Tennessee Agricultural Extension Service performs soil analysis at its laboratory in Nashville. The cost for a standard soil sample is \$7. CAFO operators should contact their local extension agent for sample containers, data sheets and appropriate testing parameters.

With regard to manure analysis, the nutrient content is essential for determining agronomic rate. If manure is applied in excess of the agronomic rate for the limiting nutrient, transport off-site is likely and the potential for resulting water pollution is increased.

- iv. (d) Setbacks – Several commenters objected to the proposed the setbacks from neighbors, wells and high quality waters for land application areas. One commenter requested that the setbacks from neighbors should be kept and that the setback from residences other than that of the CAFO owner be increased to 1,500'. One commenter suggested that the use of no-till

farming would warrant a reduction of required setbacks from waters. One commenter requested that the 35' vegetative buffer be required in addition to the setback requirement. Another commenter recommended a 50' vegetative buffer. Yet another commenter suggested additional setbacks for high quality waters.

The division reviewed the authority provided by the TWQCA and agrees with the majority of commenters that requirements that specify setbacks from churches, picnic areas, playgrounds or other neighbors for the application of litter, manure or process wastewater go beyond the scope of the TWQCA and will not be included in the regulations proposed for board approval. However, setbacks from water features such as potable wells and surface streams will be included in this regulation. With respect to potable wells the division has replaced the specific setback with a requirement that litter, manure or process wastewater be applied in accordance with NRCS Conservation Practice Standard 590. Additionally, the division reconsidered its land application area setback requirement for high quality waters. Instead of a 300' setback, the division will propose a 60' natural riparian buffer. Data presented in NCASI Technical Bulletin No. 799, "Riparian Vegetation Effectiveness," indicated that a strip of approximately 60' of diverse vegetation (shrub, grass and trees) provides optimal pollutant removal. It should be noted that the division expects that relatively few new CAFOs will be located adjacent to high quality waters since many new CAFOs are built in existing agricultural areas.

The division expects that operations that use no-till practices are likely candidates to take advantage of the 35' vegetative buffer that is allowed in lieu of the 100' setbacks. The division has no basis for requiring the 35' vegetative buffer in addition to the required setbacks or even a larger vegetative buffer.

- r. Former, 1200-4-5.14(18) Training requirements – Several commenters objected to the requirement for mandatory training for CAFO owners and operators. One commenter requested that the training requirements include a mandatory, bi-annual continuing education requirement. Another commenter requested that the training requirements be mandatory.

The division believes that CAFO owners and operators would benefit from training in the areas of nutrient management and water quality. However, the division also believes that a voluntary approach to training is more appropriate than a mandatory approach. The division will work with partner agencies to develop curriculum and training programs that can be made available to CAFO owners and operators. The division may reconsider mandatory training requirements should problems with CAFO operations result in negative impacts on water quality.

- s. 1200-4-5-.14(18) (formerly 19) – Design standards for waste management systems – Several commenters objected to the setbacks required for buildings and containment structures for new CAFOs. One commenter requested that the setbacks provided in this section be increased.

The division modified these provisions to apply to liquid waste management systems, only. The basis for this change lies in the increased risk of failure or discharge associated with storing liquid manure as opposed to dry litter/manure. Additionally, instead of including specific setbacks, the division references the applicable NRCS Conservation Practice Standard. The division believes that the setbacks established by the NRCS are appropriate for these facilities.

- t. Cost of permitting- One commenter asked about fees that may be associated with permits for CAFOs.

There are no permit maintenance fees associated with CAFOs that are covered under Tennessee's General Permit for Animal Feeding Operations. The permit maintenance fees for individual NPDES permits issued are found at: <http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-11.pdf>.

- u. Impaired streams/ water quality assessment – One commenter asked that the division specify which streams are impaired for the pollutants of concern (pathogens and nutrients). Another commenter asked if water quality assessment would be a measure of the effectiveness of the regulations. Yet another commenter asked that a baseline analysis be conducted on waters adjacent to a CAFO prior to commencement of its operation with subsequent monitoring annually. This commenter requested that land application rates be adjusted if the annual water quality monitoring indicates pollution resulting from the application of manure. Finally, this commenter requested that the division require compensation to the owner of waters polluted by any CAFO.

The division recognizes that there is a need to provide information to CAFO owners and operators regarding stream segments that are impaired by pollutants that can be discharged from CAFOs. Considering that use impairment status of streams is not static, including a list of such streams with this regulation is not appropriate. However, the division will include a list of streams impaired for nutrients and/or pathogens, based upon the most current assessment, with this document. Additionally, on a periodic basis, the division will provide agencies such as the University of Tennessee Extension Service and the NRCS with updates regarding stream segments that are impaired for nutrients and/or pathogens. This information should be disseminated to operators of animal feeding operations to allow determination of their status as a CAFO.

The division monitors water bodies throughout the state on a rotating watershed-based cycle. Therefore, water quality can be used as measure of success. It should be noted that in any given water body, there are usually multiple sources

of pollutants that must be controlled in order to see improvement. The division further advises that application of manure, litter or process wastewater in accordance with permitting requirements that include an approved nutrient management plan plus applicable setbacks and/or buffers should not negatively impact adjacent waters.

The division, on a case-by-case basis, may require permittees to participate in water quality monitoring, however, the division does not consider it necessary to require CAFOs to do so.

Finally, waters of the state are held in trust by the Department of Environment and Conservation for the citizens of the state of Tennessee. When a person causes pollution they are subject to enforcement and often times are required to pay penalties and compensation to the state for the harm caused to waters of the state.

- v. Certified nutrient management planners – One commenter asked about the requirements for persons to become certified nutrient management planners.

These regulations do not specifically require that CAFOs use certified nutrient management planners. However, large, wet CAFOs are required to develop a comprehensive nutrient management plan, as defined by the NRCS, which must be developed by a person approved by NRCS. In Tennessee, such a person could be a licensed, professional engineer or a person certified by NRCS in nutrient management planning.

- w. Health risk assessment – One commenter requested that the rules require that a health risk assessment be performed for CAFOs.

Such a requirement would go beyond the authority of the TWQCA.